

Erosion and Sediment Control Guideline

TABLE OF CONTENTS:

1	INTRODUCTION	2
1.1	GENERAL	2
1.2	EROSION AND SEDIMENT CONTROL (ESC) PLANS	2
1.3	EROSION AND SEDIMENT CONTROL TECHNIQUES	5
1.4	FURTHER INFORMATION	5



1 INTRODUCTION

This guideline provides additional information on erosion prevention and sediment control to support a development application in accordance with Council's Development Control Plan (DCP). This guideline covers:

- Erosion and Sediment Control Plans,
- Soil and Water Management Plans, and
- Erosion and Sediment Control Techniques.

1.1 GENERAL

The minimum standard of erosion prevention and sediment control planning required for a development is categorised by the total area of soil surface, which will be exposed. This includes areas of cut and fill, vegetation removal, driveways and access ways.

Minimisation through effective prevention and control management is required for all development. This should be through a **TREATMENT TRAIN** approach that utilises various devices in sequence.

The maximum area of exposure at any one time is to be restricted to 2.5 hectares. This restriction is based on the need to protect the environmentally sensitive Lake Macquarie.

Failure to comply with the requirements of this Plan can cause serious erosion and sediment control problems, costly to the community and the environment, as individual or cumulative effects. Thus, failure to comply may can result in the issuing of an order and/or the imposition of a monetary penalty under the *Environmental Planning and Assessment Act 1979*.

It is also an offence to pollute waters under the Protection of the Environment Operations Act 1997.

1.2 EROSION AND SEDIMENT CONTROL (ESC) PLANS

Disturbance 250m² to 1000m²

Where disturbance is between 250m² and 1000m², the ESC Plan should be a graphic plan (at a scale of at least 1:200) that identifies the erosion prevention and sediment control measures required for the site. Minimum requirements are outlined in the table below.

Checklist: Erosion and Sediment Control Plan – Minimum Requirements

Erosion Prevention and Sediment Control Plans as a minimum should contain:

- Locality details (address, lot no, etc),
- North point and scale,
- Property boundaries and adjoining roads,
- Existing land contours,
- Location of existing trees and vegetation,
- Location of existing significant landscape features,
- Existing watercourses and drains flowing through, or adjacent to, the site,
- Outline of proposed building/structures and disturbed areas,
- Proposed vehicular access,
- Extent of vegetation to be cleared,
- Extent of earthworks and limits of cut and fill,
- Location of proposed stockpiles,
- Location of proposed temporary and permanent site drainage,
- Location of proposed temporary erosion prevention and sediment control measures,
- Location of temporary and permanent re-vegetation areas,
- An explanation of any changes to the erosion prevention and sediment controls as the works proceed,
- Supplementary notes covering inspection and maintenance requirements.







Disturbance Exceeding 1000m²

When disturbance exceeds 1000m², ESC Plans or Soil and Water Management Plans (SWMP's) must be prepared that provide more detailed consideration and are prepared in accordance with the publication, The 'Blue Book' (Managing Urban Stormwater Soils and Construction) – by Landcom, Fourth Edition (2004).

This publication states that an ESC Plan should comprise a set of drawings showing the proposed site controls and a narrative describing how erosion and sediment control will be achieved on site. The narrative should also include proposed measures for ongoing maintenance of the installed controls. The requirements below are in addition to the Minimum Requirements Checklist above



Checklist: Erosion and Sediment Control Plan - Additional Requirements for Disturbance over 1000m²

The following additional details are required for EP&SC Plans where development exceeds 1000m²:

- Soil classification and statement regarding erosion hazard,
- Site access and site management through the various stages of the work,
- The nature and extent of regrading and filling,
- Locations where ground cover will be maintained as 'no access' areas,
- Topsoil storage, protection and re-use methodologies,
- Catchment definition and calculations,
- Details of the diversion of stormwater from upslope areas around disturbed areas,
- Site rehabilitation including schedules, revegetation program,
- The frequency and nature of maintenance activities recommended,
- Symbols key, and
- Standard notes

Soil and Water Management Plans - Disturbance Exceeding 2500m²

When disturbance exceeds 2500m², ESC measures are incorporated as a component of a SWMP in accordance with The 'Blue Book' (Managing Urban Stormwater Soils and Construction) – by Landcom, Fourth Edition (2004).

Checklist: Soil and Water Management Plans – Disturbance over 2500m²

Soil and Water Management Plans as a minimum should contain:

- Detailed calculations to determine the soil loss and the size of any sediment basins that may be required on the site,
- Information required for an EP&SC Plan,
- The location of lots, public open space, stormwater drainage systems, schools, shopping centres/community centres (if nearby),
- The location of land designated or zoned for special uses,
- Location and diagrams of all erosion and sediment site controls used,
- Locations, calculations and engineering details of any sediment basins,
- Location and details of other stormwater management structures such as; constructed wetlands, gross pollutant traps, trash racks or separators.
- Procedures for the operation and maintenance of pollution control equipment/works must also be noted including:
 - o quality and characteristic of any wastes before treatment,
 - o estimate quality of wastes after treatment,
 - o details of permitted maximum pollution levels specified by Council or the EPA,
 - o estimate of the average volumes of waste from the site,
 - o details of the treatment methods eg flocculation agents,
 - o methods of disposal of the wastes, including discharge points and/or disposal areas,
 - o details of major items of equipment used eg pumps, sprays etc.,
 - identify any special requirements or site conditions that exist (and may require specialist services/advice),
 - o identify inspection procedures and inspectors,
 - o any other relevant matters.



Statement of compliance for ESC and SWMP

The applicant shall submit with the ESCP/SWMP, a Statement of Compliance, stating that:

- The Plan has been developed by an appropriately qualified and experienced professional in erosion and sediment control;
- The Plan complies with the requirements of a ESCP/SWMP as set out in LMCC's DCP and these guidelines;
- The Plan and associated documents, calculations and drawings, have been prepared to a standard, which, if properly implemented, will achieve the water release criteria of 50mg/L of Total Suspended Solids (TSS) as identified in The Blue Book (Managing Urban Stormwater – Soils and Construction. Landcom, 2004); and
- All erosion and sediment control measures are in accordance with the latest version of The Blue Book (Managing Urban Stormwater – Soils and Construction. Landcom, 2004), Best Practice Erosion and Sediment Control - International Erosion Control Association (Australasia) 2008, or other current recognised industry standard for erosion and sediment control for Australian conditions.

1.3 EROSION AND SEDIMENT CONTROL TECHNIQUES

All measures are to be in line with The 'Blue Book' (Managing Urban Stormwater Soils and Construction) by Landcom, Fourth Edition (2004) as a minimum and then additional measures as required to prevent any sediment leaving the site.

1.4 FURTHER INFORMATION

For further information on erosion and sediment control requirements, please contact Council's Erosion and Sediment Control Officer.

The 'Blue Book' (Managing Urban Stormwater Soils and Construction) – Landcom, Fourth Edition (2004). <u>www.landcom.com.au</u>

'White Books' - IECA 2008. Best Practice Erosion and Sediment Control. Books 1-6.International Erosion Control Association (Australasia). Picton NSW. <u>http://www.austieca.com.au/</u>